



Introduction to Apache Roller

Matt Raible

Apache Roller Committer

June 2007

Today's Agenda

- Introductions
- What is Apache Roller?
- Installing Roller
- Roller Architecture
 - Blog Customization
 - Server Customization
- Other Features: Clients and Planet
- Q and A



The Source for Apache, Tomcat, Roller, Geronimo & Axis

- ❖ Covalent is the Leading Provider of Support and Services for Apache Software Foundation Open Source Projects, Namely Tomcat, Geronimo, Roller, Axis, & Apache, the World's Leading Web Server*
- ❖ Covalent is One of the Few Sources of Full Commercial Support for Apache, Axis, Roller, Geronimo & Tomcat on a Global Basis
- ❖ Covalent Currently Supports More Than 50% of Fortune 500 and 20% of Global 2000 Companies


**62% global Web server marketshare ~Netcraft April 2006 Web Server Survey*

Who is Matt Raible?

- One of the first Roller users and Committers - started in August 2002
- Committer on several open source projects: Apache Roller, AppFuse, XDoclet, Struts Menu, Display Tag
- Java EE 5.0 and JSF 1.2 Expert Group Member
- Author: Spring Live (SourceBeat) and contributor to Pro JSP (Apress)



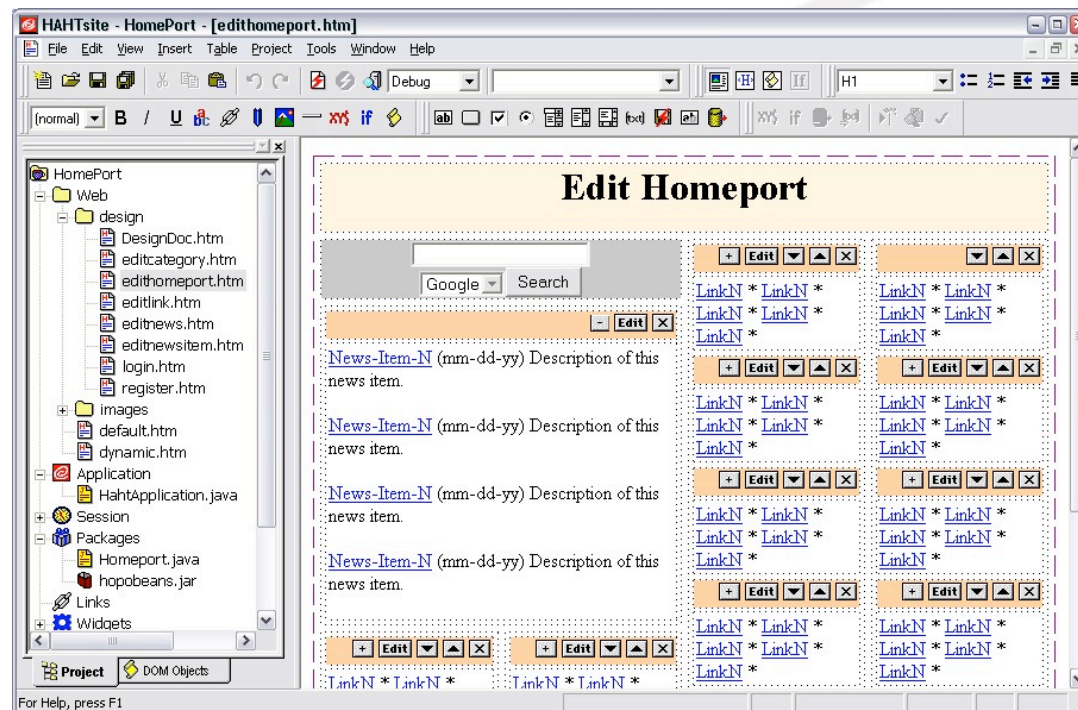
What is Apache Roller?

- Apache Roller is a full-featured, multi-user and group-blog server suitable for blog sites large and small
- Cool Features:
 - Multi-user and Group blogging
 - Comment moderation and spam prevention
 - Complete control over UI with templates
 - Built-in Search
 - RSS 2.0 and Atom 1.0 Support 
 - Pluggable Cache and Rendering System



History

- Started by Dave Johnson in 2000 as “Homeport”



<http://rollerweblogger.org/roller/date/20021231>

History of Roller

- In 2002, Dave ditched EJBs and HAHTsite IDE for open source tools (Ant, Castor, Struts, and Velocity)
- April 5, 2002: Roller 0.9.0 Released
- April 17, 2002: O'Reilly Article "[Building an Open Source J2EE Weblogger](#)" Published
- July 31 - August 7, 2002: The world starts blogging with Roller

<http://rollerweblogger.org/roller/date/20021231>



Roller since 2002

- Roller now powers jroller.com, blogs.sun.com, [IBM developerWorks blogs](http://IBMdeveloperWorks.com) and many others
- Dave hired by Sun to work on Roller full-time in September 2004
- Roller began incubation at Apache in June 2005
- April 23, 2007: Graduated and released 3.1

But what *is* Roller?

- Roller is a **blogging** engine
- **Blogs** make web publishing easy
 - Everyone can do it
 - No need for IT or Webmasters
 - Tools are in the users hands
- **Feeds** make reading blogs easy
 - Feeds are XML-based: RSS or Atom
 - You *subscribe* to a feed in a **Feed Reader**
 - **Feed Readers** are like inboxes for the web





Viewing a Weblog Entry

Raible Designs | What a Trip - Amsterdam was a blast!

http://raibledesigns.com/rd/entry/what_a_trip_amsterdam_was

LOGIN | RESUME | CONTACT | ARCHIVES | ABOUT | WEBLOG | HOME

ALL | JAVA | GENERAL | ROLLER | MAC OS X | THE WEB | OPEN SOURCE | THE BUS

« ApacheCon EU: Compar... | Main | Off to Florida »

Tuesday May 08, 2007

What a Trip - Amsterdam was a blast!

Last week's trip to Europe for ApacheCon EU was nothing short of spectacular. Amsterdam was an incredible city that amazed me with its awesome biking system (and usage!), incredible atmosphere and a nice sense of relaxation. I think the picture below sums up our trip nicely. The weather couldn't have been better - sunny and warm with a cool breeze.



ApacheCon was likely an excellent conference, but I'm proud to say I didn't attend a single session. I did manage to make it to Sun's party on Thursday night (thanks Dave!), but that was about it. At the party, the Wicket guys had a BOF, which my dad and I sat in on. Thanks to Martin, Eelco and others for the good conversation, even if we did have to shout.



Done

Matt Raible is an open source developer who enjoys Java, Web Development, Ajax and AppFuse. [Contact me](#) for rates.

« June 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Today

Search This Site

Recent Entries

Webinar on Wednesday:
Introduction to Apache
Roller



Viewing a Weblog Entry

Covalent Technologies - Windows Internet Explorer

http://blog.covalent.net/roller/

Google

Covalent Tech... Golf HandicapTracker Connecting...

BLOG HOME WWW.COVALENT.COM

Covalent Technologies

Thoughts and Insights from the Leading Provider of Enterprise Open Source Solutions.

All GENERAL TECHNOLOGY MARKETING

Main | Next page »

Friday March 16, 2007

Critical Security Update Affecting Tomcat

Affected Products

All distributed Tomcat versions 4.x, 5.0, 5.5.22 and prior, and 6.0.9 and prior either shipped by Covalent with Enterprise Ready Server or packaged by the Apache Software Foundation.

Problem Description

Affected versions of Tomcat permit backslashes in the form of "\ " or "%5C" in the URL and interpret this as a path delimiter on all platforms. This allows an attacker coming through a proxy to reach an application that is not supposed to be visible, or was configured with restrictions at the Apache HTTP Server outward facing proxy (via mod_proxy or mod_jk).

For example:

```
/webapps
/fac
```

Covalent Technologies

March 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Today

Search This Site

Internet 100%

Reading a Weblog Entry

NetNewsWire (17 unread)

Refresh All Mark All As Read Next Unread Subscribe Unsubscribe Sites Drawer Post to Weblog Search

(New items) (17)


Raible Designs (17)

- Mailing Lists
- Open Source
- The Web
- Java
- Ruby
- News
- AppFuse
- Fisheye
- Humor
- Jobs
- Interesting

Raible Designs headlines	Date
• Proof that Abbie is growing up fast	21 May 2007
• A Story about My Mom	13 May 2007
• Off to Florida	08 May 2007
What a Trip – Amsterdam was a blast!	08 May 2007
• Having fun in Amsterdam	02 May 2007
• The Flight to Amsterdam	27 Apr 2007
• Chelan Cider to be carried by Hale's Ales	23 Apr 2007

What a Trip – Amsterdam was a blast!

Last week's trip to Europe for ApacheCon EU was nothing short of spectacular. Amsterdam was an incredible city that amazed me with its awesome biking system (and usage!), incredible atmosphere and a nice sense of relaxation. I think the picture below sums up our trip nicely. The weather couldn't have been better - sunny and warm with a cool breeze.



17 unread | http://raibledesigns.com/rd/entry/what_a_trip_amsterdam_was Spotlight



Why choose Roller?

- ✔ Proven, full-featured blogging solution for big sites
 - ✔ Used by Sun, IBM, Yale University, Covalent and ESRI
- ✔ Open Source and Apache Licensed
- ✔ Active and growing community at Apache
- ✔ Standard Java Web Application Architecture

Why choose Roller?

- It works great if you know what you're doing
- Nice looking example sites:
 - <http://blogs.sun.com/greimer>
 - <http://blogs.sun.com/jonathan>
 - <http://blogs.usd.edu/jrbethke>
 - <http://rollerweblogger.org/roller>
 - <http://raibledesigns.com>
 - <http://ryandelaplante.com>
 - <http://blog.covalent.net/roller/covalent/>

Installing Roller

1. Download Roller 3.1 from <http://cwiki.apache.org/confluence/display/ROLLER/Roller+Downloads>
2. Download Hibernate and other JARs from <https://roller.dev.java.net/servlets/ProjectDocumentList?folderID=6962>
3. Copy JARs from java.net download into **apache-roller-3.1/webapp/roller/WEB-INF/lib**

Installing Roller: Java & MySQL

4. Download and Install Java 5 from <http://java.sun.com/javase/downloads>
5. Download and install MySQL 5 from <http://dev.mysql.com/downloads>
6. Create database with files in **WEB-INF/dbscripts**:

```
mysqladmin -u root -p create roller  
cd webapp/roller/WEB-INF/dbscripts/mysql  
mysql -u root -p roller < createdb.sql
```

Installing Roller: Tomcat

7. Download and install Tomcat 6 from <http://tomcat.apache.org/download-60.cgi>
8. Copy **apache-roller-3.1/webapp/roller** to \$CATALINA_HOME/webapps/ROOT
9. Copy activation.jar, mail.jar and mysql-connector-java-5.0.3-bin.jar to \$CATALINA_HOME/lib (common/lib for Tomcat 5.x)
» continued on next page

Installing Roller: Tomcat (cont.)

10. Create **ROOT/META-INF/context.xml** with the following contents:

```
<Context path="" reloadable="false" antiJARLocking="true"
    antiResourceLocking="false" allowLinking="true">

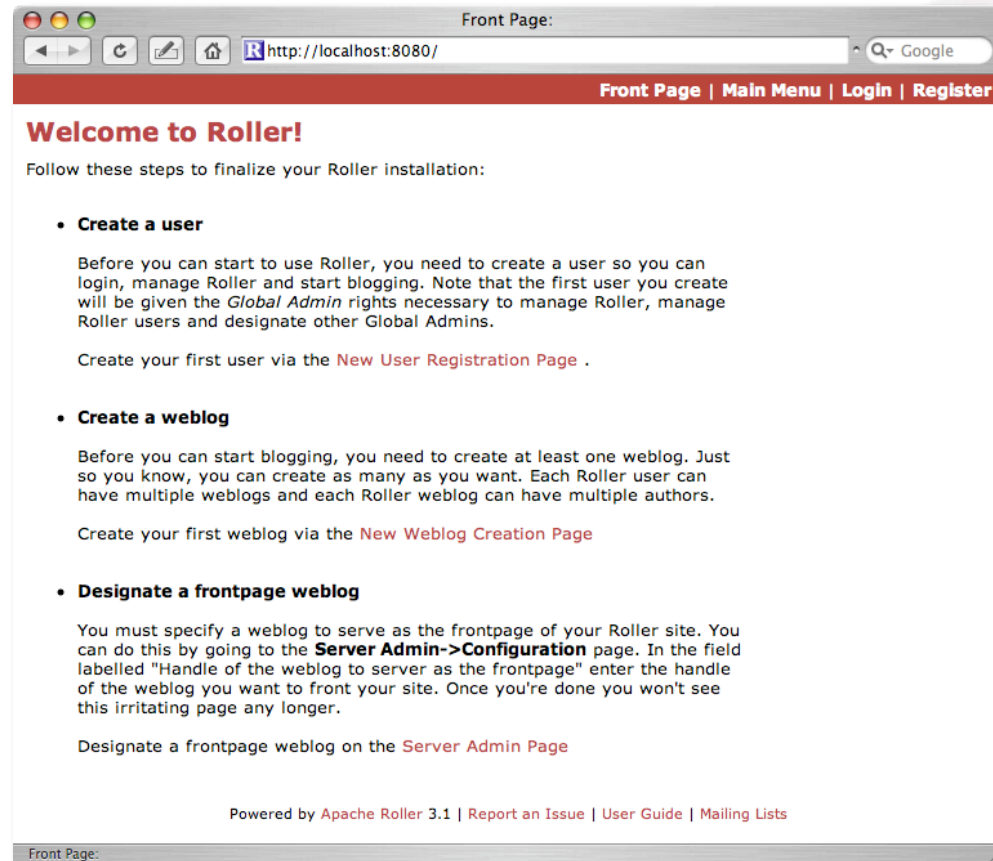
    <Resource name="jdbc/rollerdb" auth="Container"
        type="javax.sql.DataSource"
        maxActive="20" maxIdle="10" maxWait="100"
        driverClassName="com.mysql.jdbc.Driver"
        username="root" password=""
        url="jdbc:mysql://localhost/roller"/>

    <Resource name="mail/Session" auth="Container"
        type="javax.mail.Session"
        mail.smtp.host="localhost" />

</Context>
```

Roller Install: Startup

- Start Tomcat and create your weblog at <http://localhost:8080>



Create a User

Front Page: New User Registration

http://localhost:8080/roller-ui/user.do?method=registerUser

[Front Page](#) | [Main Menu](#) | [Login](#) | [Register](#)

New User Registration

Use this form to register a new Roller user, please create only one user account per person.

Full Name	<input type="text" value="Matt Raible"/>	Your full name (with no HTML).
Username	<input type="text" value="mraible"/>	A short one word username for your user account. Please limit it to simple ASCII alphanumeric characters (a-z, A-Z and 0-9) and do not use HTML.
Password	<input type="password" value="....."/>	Your password.
Password (Confirm)	<input type="password" value="....."/>	Confirm your password.
Email	<input type="text" value="matt@raibledesigns.com"/>	Please enter valid email address, the site administrator may disable your account if he/she cannot reach you via email.
Locale	<input type="text" value="English (United States)"/>	Your preferred locale.
Timezone	<input type="text" value="MDT - America/Denver"/>	Your preferred timezone.

Powered by [Apache Roller 3.1](#) | [Report an Issue](#) | [User Guide](#) | [Mailing Lists](#)

Front Page: New User Registration

Create a Weblog

Front Page: Create Weblog

[http://localhost:8080/roller-ui/createWebsite.do?method=create](#)
[Google](#)


logged in as mraible

Front Page | Main Menu | Logout

Create Weblog

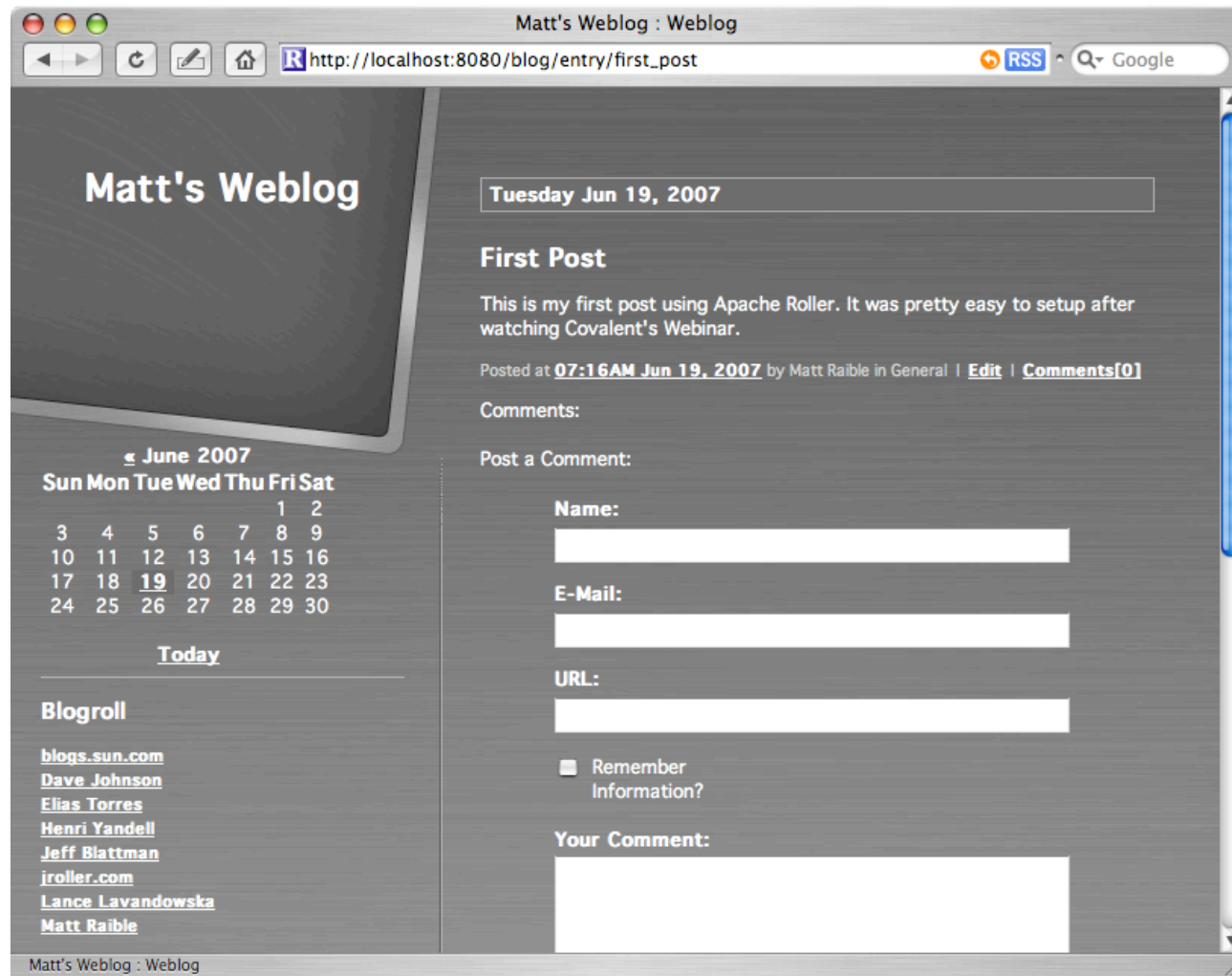
Use this form to create a new weblog for you or for you and a group of your friends.

Name	<input type="text" value="Matt's Weblog"/>	The name is the title of your weblog, it will be displayed at the top of your weblog page, and in the title field of your weblog's newsfeed. This field should not include HTML.
Description	<input type="text"/>	The description of your weblog may be displayed at the top of your weblog (depending on the theme you choose) and it will be used in description or subtitle field of your newsfeed. This field should not include HTML.
Handle	<input type="text" value="blog"/> URL: http://localhost:8080/blog	The handle is a short one word name for your weblog. It will be used in your URL, so please limit it to simple ASCII alphanumeric characters (a-z, A-Z and 0-9) and do not use HTML.
Email Address	<input type="text" value="matt@raibledesigns.com"/>	Your email address or the email address of the person responsible for the weblog that you are creating.
Locale	<input type="text" value="English (United States)"/>	The default locale to be used for the display of this weblog when the browser does not specify a locale.
Timezone	<input type="text" value="MDT - America/Denver"/>	The timezone to be used for entry and display of this weblog.
Theme	<input type="text" value="brushedmetal"/>	The theme to be used to display this weblog. Later, you can easily switch to another theme or edit the themes templates to customize it to your liking.



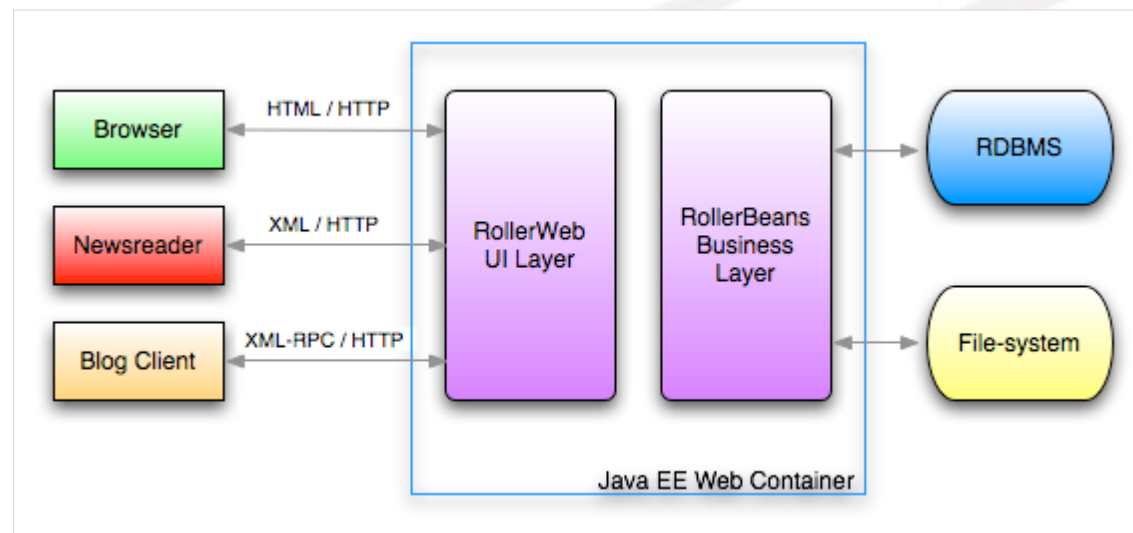
Front Page: Create Weblog

The obligatory first post



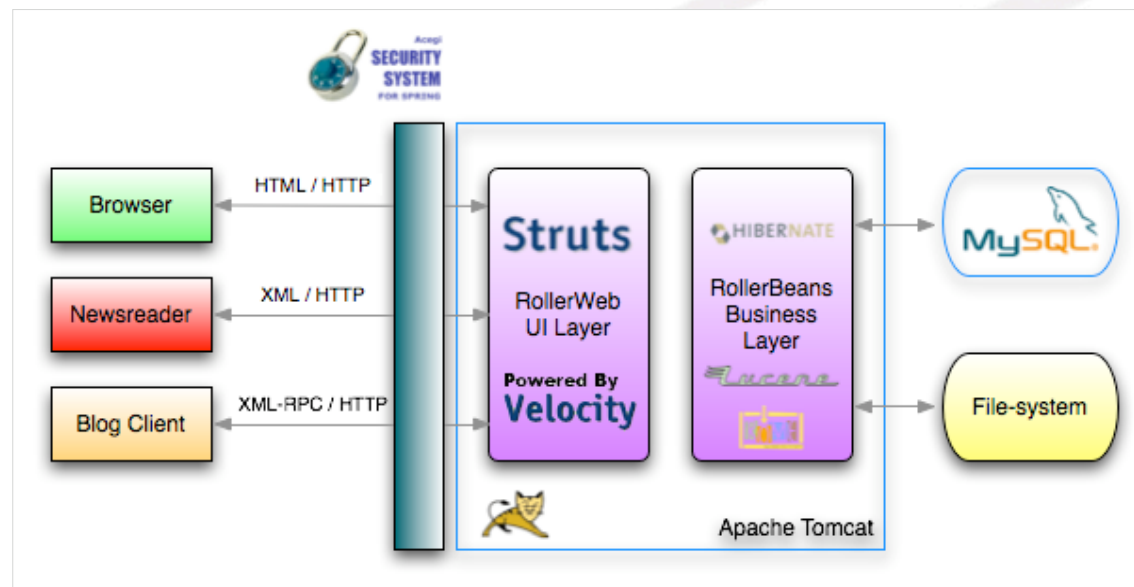
Roller Architecture: Enterprise

- ❖ Web UI via Java Servlets and JSP
 - ❖ Front controller, Web MVC and Open Session In View patterns
- ❖ Persistence via JDBC
 - ❖ Factory, Façade and Data Mapper patterns



Roller Architecture: Geek Speak

- Roller Web: Web and UI Layer
 - Editor UI via **Struts and JSP**, blog and feed rendering via **Velocity**
 - Feed parsing via **ROME**, Blogger API via **Apache XML-RPC**
- Roller Beans: Business and Persistence Layer
 - **Hibernate** for DBMS, **Lucene** for search



What's New in Roller 4.0

- Easier Theme Customization
- Easy Installation
- Java 5, Open JPA and Struts 2
- <http://cwiki.apache.org/confluence/display/ROLLER/What%27s+New+in+Roller+4.0>



Weblog Customization

- Each weblog is defined by user-editable templates
- A weblog has three required templates: **Weblog**, **_day** and **_css**
 - + any number of user-defined templates
- Template language: Apache Velocity
 - Other languages available via plugins
- Data available to templates via **Models**

Example Weblog Template

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
  <title>${model.weblog.name} : ${model.weblogPage.name}</title>
  #showAutodiscoveryLinks(${model.weblog})
  <style type="text/css">#includeTemplate(${model.weblog} "_css")</style>
</head>
<body>

<div class="content_wrapper">
  <div class="content">
    <h1 class="weblogName">${utils.escapeHTML(${model.weblog.name})}</h1>

    <center>
      #set($rootCategory = ${model.weblog.getWeblogCategory("nil")})
      #showWeblogCategoryLinksList($rootCategory false false)
    </center>

    #set($pager = ${model.getWeblogEntriesPager()})
    <div class="next-previous">
      #if (${model.results})
        #showWeblogSearchAgainForm(${model.weblog})
        #showNextPrevSearchControl($pager)
      #else
        #showNextPrevEntriesControl($pager)
      #end
    </div>

    #showWeblogEntriesPager($pager)
```

As an end user, you can:

- Without hacking HTML or CSS:
 - Preview and switch to a new theme
 - Add bookmarks to your blogroll
 - Add categories and tags
- With some HTML, CSS and template hacking:
 - Customize your blog templates
 - Override Roller macros
 - Create your own blog themes

Server Customization

- Single-Sign on with Acegi Security (Yale's CAS, OpenID)
- Use Roller Plugins to:
 - Transform entry content at display time
 - Plugin your own models for use in templates
 - Plugin your own template language
 - Add your own comment validation rules



Developer Customization

- As a developer, you can use Roller web services from any language
 - Automated blogging via MetaWeblog or Atom Protocol
 - Automate administration via Roller Admin Protocol
- Add new plugins, written in Java
 - Plugins for: JSPWiki, Emoticon, Technorati, Wikipedia, Google, Textile

Other Features

- ✔ Planets are useful for aggregating feeds from many sources
- ✔ Weblog clients make it easy to publish and edit entries to your blog

What's a Planet?

- **A Community Aggregator**
- Portal-like web application which displays weblog posts from a group of closely related but separately hosted blogs
- Provides aggregated feeds so that readers may subscribe to the group as a whole
- Most popular is **Planet**, which is Python-based



Example Planets

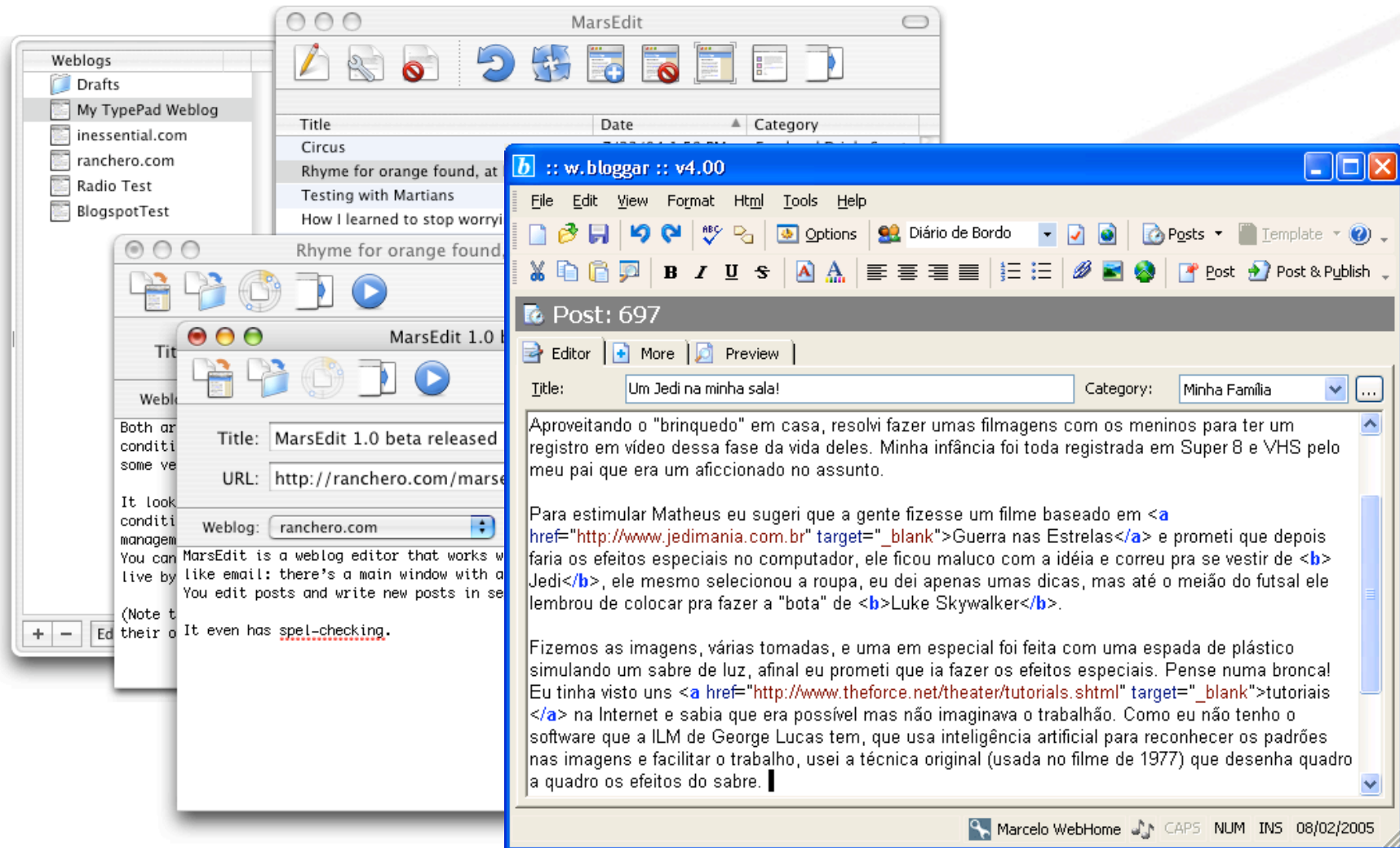
The collage consists of several overlapping browser windows from June 19, 2007. The top-left window shows the Planet Mozilla website. The top-right window shows the Planet Apache website. The central, largest window is the Java.Blogs community page, which has a blue header and a white main content area. The page welcomes visitors to the Java.Blogs community and lists recent entries, including 'We do it just a little bit better at... Wawa', 'Bad Bad USB', 'I am a paperless developer', and 'OpenEdit needs your Feedback'. It also features a 'Recently Added Blogs' section with entries like 'With Tech Eyes' and 'Seeking The Way'. The right sidebar of the Java.Blogs page includes logos for Atlassian and ConTeXis, along with a 'Blog Status' section showing the number of blogs and new entries for the week.

- Roller's built-in Planet server
- Standalone Planet server ready to ship
 - Multiple Planets per server
 - Each Planet defines Aggregation Groups
 - Based on Roller
 - Same back-end architecture
 - Same rendering system

Weblog Clients

- ▼ Windows: [w.bloggar](#)
- ▼ Mac: [MarsEdit](#)
- ▼ Firefox: [Scribefire](#)
- ▼ All: Roller!

Weblog Client Screenshots





Client Settings

- URL to Blog: <http://yourserver.com>
- Server API URL:
<http://yourserver.com/roller-services/xmlrpc>
- Many clients have support for Roller, but they're missing "roller-services" in the Server API URL
- Username and Password

Questions?



- ▼ Roller User Mailing List:
 - ▼ user@roller.apache.org
- ▼ Covalent Support:
 - ▼ <http://support.covalent.net>
 - ▼ 925/974-8800/800/444-1935
 - ▼ support@covalent.net